

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-63. (Canceled)

64. (Currently Amended) A method of profiling a Web user, comprising:

anonymously intercepting and capturing ~~monitoring packets~~ each packet received
from a Web user having a permanent anonymous user identifier at an Internet Service
Provider (ISP) point of presence (POP) prior to each packet from the Web user being routed
over the Internet;

analyzing each of the intercepted and captured ~~identifying-monitored~~ packets to
identify packets having headers associated with Web page requests;

~~anonymously capturing, at the Internet Service Provider (ISP) point of presence~~
~~(POP), each of the packets identified as being associated with Web page requests;~~

extracting, at the ISP POP, a Uniform Resource Locator (URL) of the requested Web
page and ~~[[an]] a current~~ IP address of the packets identified as being associated with the
Web page request of the Web user from the headers identified to be associated with Web
page requests;

processing the ~~extracted~~ current IP address extracted from the captured headers to
correlate the ~~extracted~~ current IP address extracted from the captured headers with a
permanent anonymous user identifier using a cross-reference table at the ISP POP;

associating each extracted URL with the permanent anonymous user identifier
correlated with the ~~extracted~~ current IP address extracted from the captured headers;

for each permanent anonymous user identifier correlated with the ~~extracted~~ current IP address extracted from the captured headers, storing the URL of the requested Web page and the permanent anonymous user identifier correlated with the ~~extracted~~ current IP address extracted from the captured headers at the ISP POP;

developing a user profile for the permanent anonymous user identifier, at the ISP POP, based on the extracted URLs associated with Web pages stored at the ISP POP and requested by the Web user associated with the permanent anonymous user identifier; and

cross referencing Web site profiles of Web users with the extracted URLs associated with Web pages requested by the Web user associated with the permanent anonymous user identifier to generate an updated user profile, at the ISP POP, based on inferred user demographics of the Web sites requested by the Web user associated with the permanent anonymous user identifier.

65. (Previously Presented) The method of Claim 64 wherein the profile of the user contains data selected from demographic data.

66. (Previously Presented) The method of Claim 65 wherein said demographic data is selected from the group consisting of user's age, user's gender, user's income and user's highest attained education level.

67. (Previously Presented) The method of Claim 64 wherein the profile of the user contains psychographic data.

68. (Previously Presented) The method of Claim 67 wherein said psychographic data includes data on the user's interests.

69. (Previously Presented) The method of Claim 64, further comprising providing a database associating each of said plurality of Web sites with demographic characteristics of known persons who have accessed said sites.

70. (Previously Presented) The method of Claim 69 wherein said database is provided by a Web site ratings service.

71. (Previously Presented) The method of Claim 64 wherein the user profile comprises an update combined with an existing user profile.

72. (Previously Presented) The method of Claim 71 wherein the generating a user profile comprises combining the profiles of the Web sites requested by a user identifier to the existing user profile using an averaging algorithm.

73. (Previously Presented) The method of Claim 72 wherein said user profile includes data on a plurality of demographic categories, each associated with a rating, and the method further comprises filling in a value for the rating for any demographic category having a low confidence measure.

74. (Previously Presented) The method of Claim 73 wherein filling in a value comprises using an average rating of persons having similar profiles to that of said user for a category having a low confidence measure.

75. (Previously Presented) The method of Claim 74 wherein said average rating is determined using a clustering algorithm.

76. (Previously Presented) The method of Claim 64 further comprising erasing records of which Web sites said user has visited after developing the user's profile to protect user privacy.

77. (Previously Presented) The method of Claim 64 further comprising delivering selective advertising to the user identifier based on the user profile associated with the user identifier.

78. (Previously Presented) The method of Claim 77 wherein delivering selective advertising comprises transmitting a pop-up advertisement to a display of a computer associated with a user identifier.

79. (Previously Presented) The method of Claim 64, wherein the developing a user profile for user identifier further comprises generating, for a user associated a user identifier, a user profile having a rating for categories of Web sites of interest to the user and a confidence measure representing an estimate of accuracy of a category's rating.

80. (Currently Amended) A computer for profiling a Web user, comprising:

a memory for storing a program;

a processor operative with the program to anonymously intercept and capture ~~monitor~~ ~~packets~~ each packet received from a Web user having a permanent anonymous user identifier at an Internet Service Provider (ISP) point of presence (POP) prior to each packet from the Web user being routed over the Internet, to analyze each of the intercepted and captured ~~identify monitored~~ packets to identify packets having headers associated with Web page requests, ~~to anonymously capture, at the Internet Service Provider (ISP) point of presence (POP), packets identified as being associated with Web page requests, to extract, at the ISP POP, a Uniform Resource Locator (URL) of the requested Web page and [[an]] a current IP address of the packets identified as being associated with the Web page request of the Web user from the headers identified to be associated with Web page requests, to process the~~ extracted current IP address extracted from the captured headers to correlate the ~~extracted current IP address extracted from the captured headers~~ with a permanent anonymous user identifier using a cross-reference table at the ISP POP, to associate each extracted URL with the permanent anonymous user identifier correlated with the ~~extracted current IP address extracted from the captured headers~~, to store, for each permanent anonymous user identifier correlated with the ~~extracted current IP address extracted from the captured headers~~, the URL of the requested Web page and the permanent anonymous user identifier correlated with the ~~extracted current IP address extracted from the captured headers~~ at the ISP POP, to develop a user profile for the permanent anonymous user identifier, at the ISP POP, based on the extracted URLs associated with Web pages stored at the ISP POP and requested by the Web

user associated with the permanent anonymous user identifier; and to cross reference, at the ISP POP, Web site profiles of Web users with the extracted URLs associated with Web pages requested by the Web user associated with the permanent anonymous user identifier to generate an updated user profile based on inferred user demographics of the Web sites requested by the Web user associated with the permanent anonymous user identifier.

81. (Previously Presented) The computer of Claim 80 wherein the profile of the user contains data selected from demographic data.

82. (Previously Presented) The computer of Claim 81 wherein the demographic data is selected from the group consisting of user's age, user's gender, user's income and user's highest attained education level.

83. (Previously Presented) The computer of Claim 80 wherein the profile of the user contains psychographic data.

84. (Previously Presented) The computer of Claim 83 wherein said psychographic data includes data on the user's interests.

85. (Previously Presented) The computer of Claim 90, further comprising a database associating each of said plurality of Web sites with demographic characteristics of known persons who have accessed said sites.

86. (Previously Presented) The computer of Claim 85 wherein said database is provided by a Web site ratings service.

87. (Previously Presented) The computer of Claim 80 wherein the user profile of the user identifier comprises an existing user profile.

88. (Previously Presented) The computer of Claim 87 wherein the processor generates a user profile by combining the profiles of the Web sites requested by a user identifier to the existing user profile using an averaging algorithm.

89. (Previously Presented) The computer of Claim 88 wherein said user profile includes data on a plurality of demographic categories, each associated with a rating, and the processor fills in a value for the rating for any demographic category having a low confidence measure.

90. (Previously Presented) The computer of Claim 89 wherein the processor fills in a value by using an average rating of persons having similar profiles to that of said user for a category having a low confidence measure.

91. (Previously Presented) The computer of Claim 90 wherein said average rating is determined using a clustering algorithm.

92. (Previously Presented) The computer of Claim 80 wherein the processor erases records of which Web sites said user has visited after developing the user's profile to protect user privacy.

93. (Previously Presented) The computer of Claim 80 wherein the processor delivers selective advertising to the user identifier based on the user profile associated with the user identifier.

94. (Previously Presented) The computer of Claim 93 wherein the processor delivers selective advertising by transmitting a pop-up advertisement to a display of a computer associated with a client having the user identifier.

95-108. (Canceled)

109. (Currently Amended) A non-transitory computer readable medium comprising a program for profiling a Web user by performing the steps of:

anonymously intercepting and capturing ~~monitoring packets~~ each packet received from a Web user having a permanent anonymous user identifier at an Internet Service Provider (ISP) point of presence (POP) prior to each packet from the Web user being routed over the Internet;

analyzing each of the intercepted and captured ~~identifying monitored~~ packets to identify packets having headers associated with Web page requests;

~~anonymously capturing, at the Internet Service Provider (ISP) point of presence (POP), each of the~~ packets identified as being associated with Web page requests;

extracting, at the ISP POP, a Uniform Resource Locator (URL) of the requested Web page and ~~[[an]] a current~~ IP address ~~of the packets identified as being associated with the Web page request~~ of the Web user from the headers identified to be associated with Web page requests;

processing the ~~extracted~~ current IP address extracted from the captured headers to correlate the ~~extracted~~ current IP address extracted from the captured headers with a permanent anonymous user identifier using a cross-reference table at the ISP POP;

associating each extracted URL with the permanent anonymous user identifier correlated with the ~~extracted~~ current IP address extracted from the captured headers;

for each permanent anonymous user identifier correlated with the ~~extracted~~ current IP address extracted from the captured headers, storing the URL of the requested

Web page and the permanent anonymous user identifier correlated with the ~~extracted~~
current IP address extracted from the captured headers at the ISP POP;

developing a user profile for the permanent anonymous user identifier, at the ISP
POP, based on the extracted URLs associated with Web pages stored at the ISP POP and
requested by the Web user associated with the permanent anonymous user identifier; and

cross referencing Web site profiles of Web users with the extracted URLs
associated with Web pages requested by the Web user associated with the permanent
anonymous user identifier to generate an updated user profile, at the ISP POP, based on
inferred user demographics of the Web sites requested by the Web user associated with
the permanent anonymous user identifier.